National Aeronautics and
Space Administration

FIRST WOMAN

NASA'S PROMISE FOR HUMANITY

ISSUE No. 1: DREAM TO REALITY



NASA'S FIRST

XR-ENABLED
(VIRTUAL + AUGMENTED REALITY)
GRAPHIC NOVEL

For more information visit:
www.nasa.gov/specials/calliefirst

NOT FOR SALE
For General Public Use

First Woman Graphic Novels and Interactive Experiences

This graphic novel, and accompanying interactive experiences tells the tale of a fictional character, Callie Rodriguez, the first woman to ever explore the Moon.

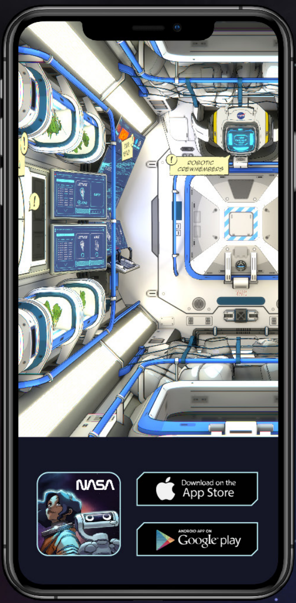
Join Callie's journey to the Moon by scanning the QR codes and downloading the *First Woman* app. For additional information and more content, visit: www.nasa.gov/specials/calliefirst.

INTERACTIVE EXPERIENCES: GUIDE

QR Codes

- Open the camera on your device
- Point the camera at the QR Code
- Click on the website pop-up and explore!



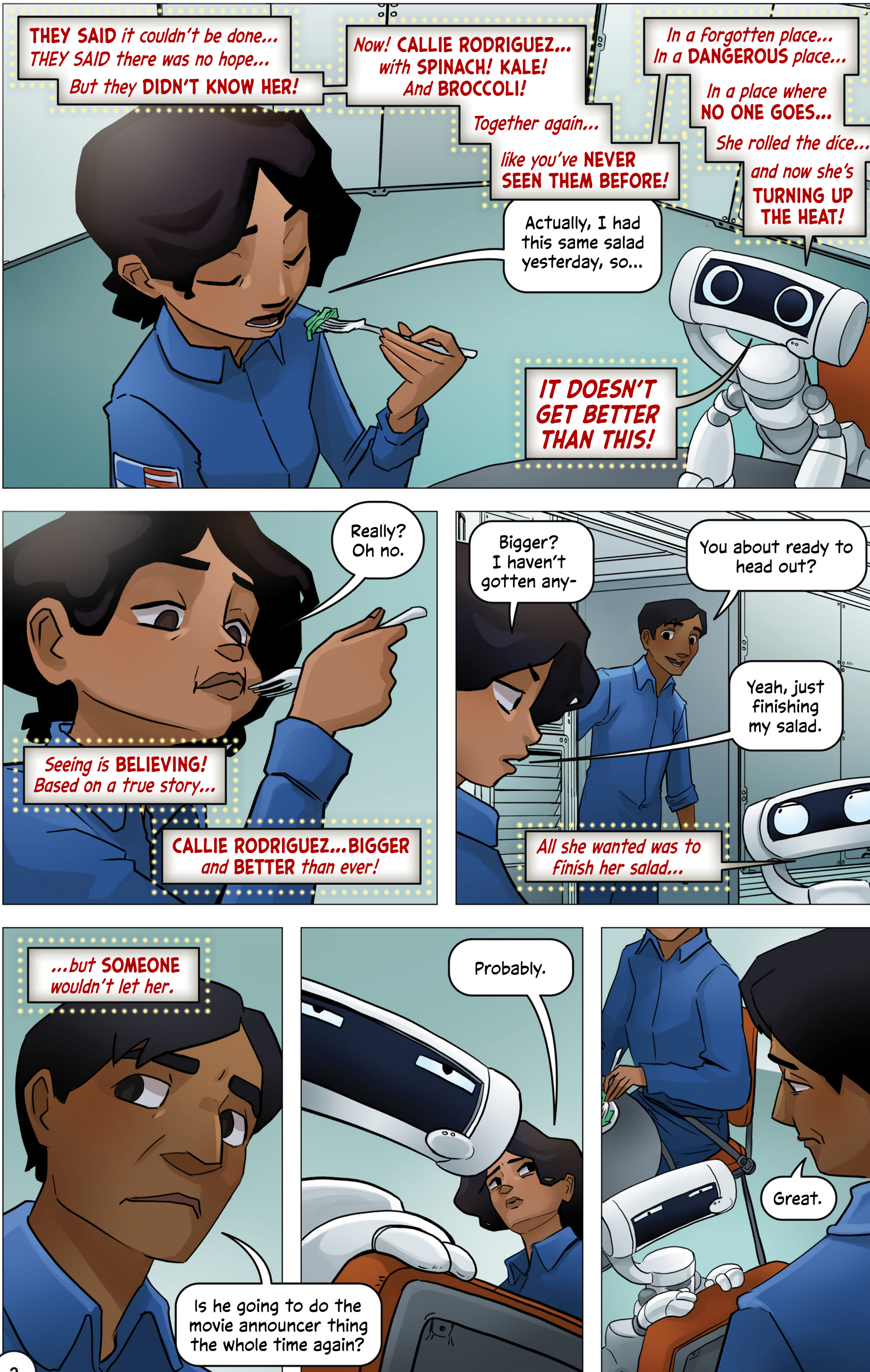


Download and XR Icon

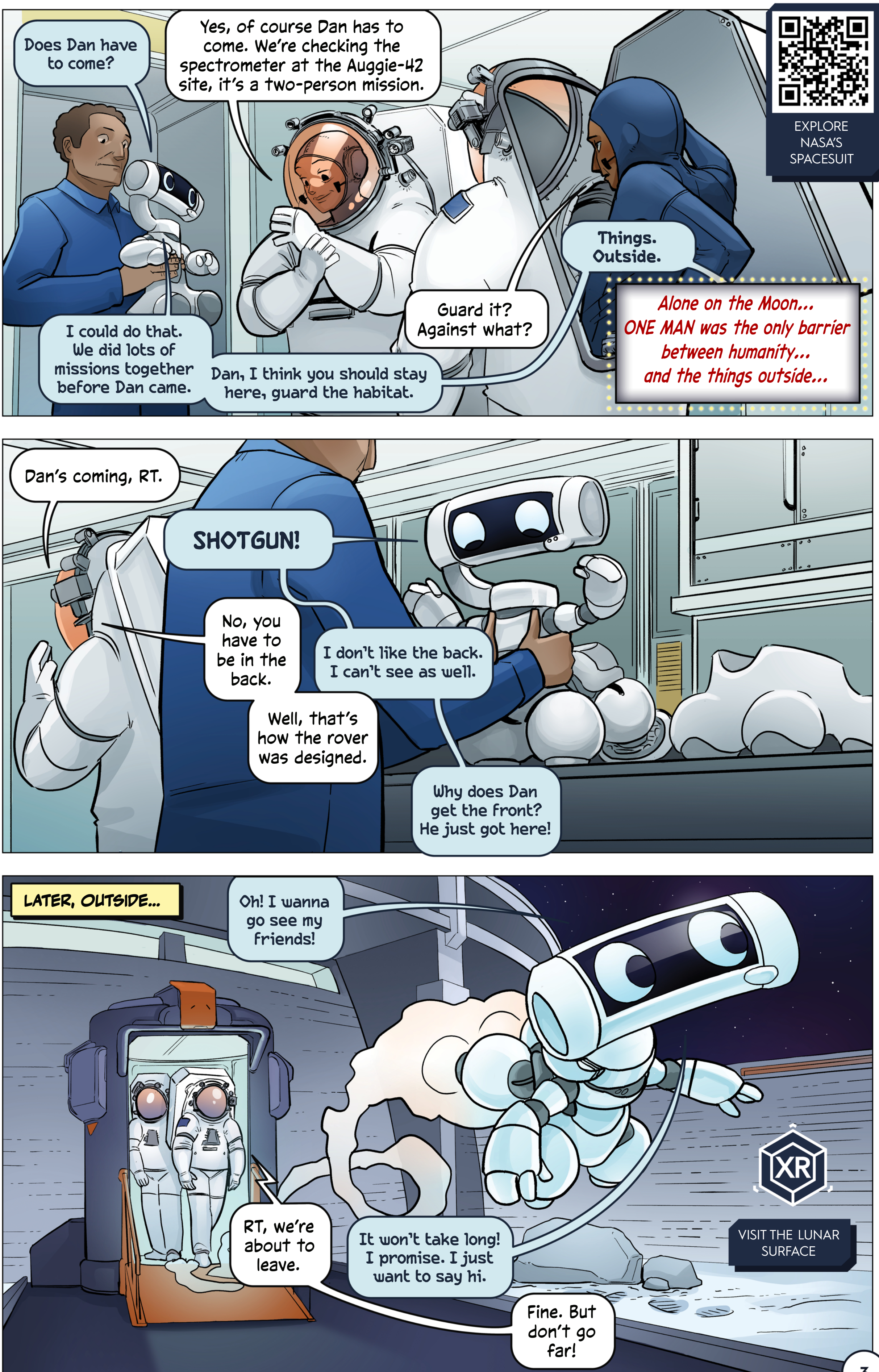
- Go to Google Play or the App Store to download the *First Woman* app
- Launch the app on your device
- Scan pages in the graphic novel with the XR icon or explore them directly in the app!

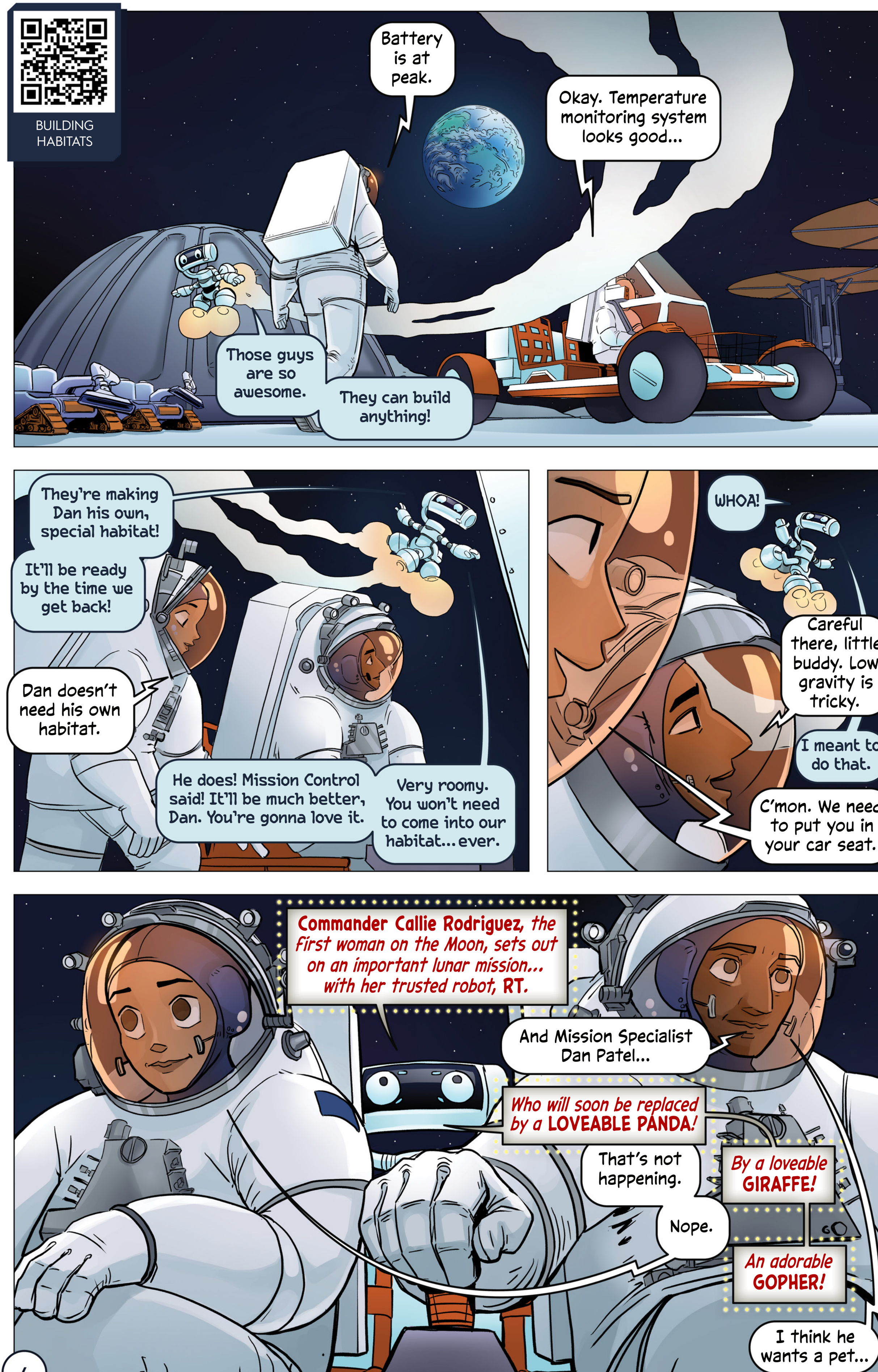
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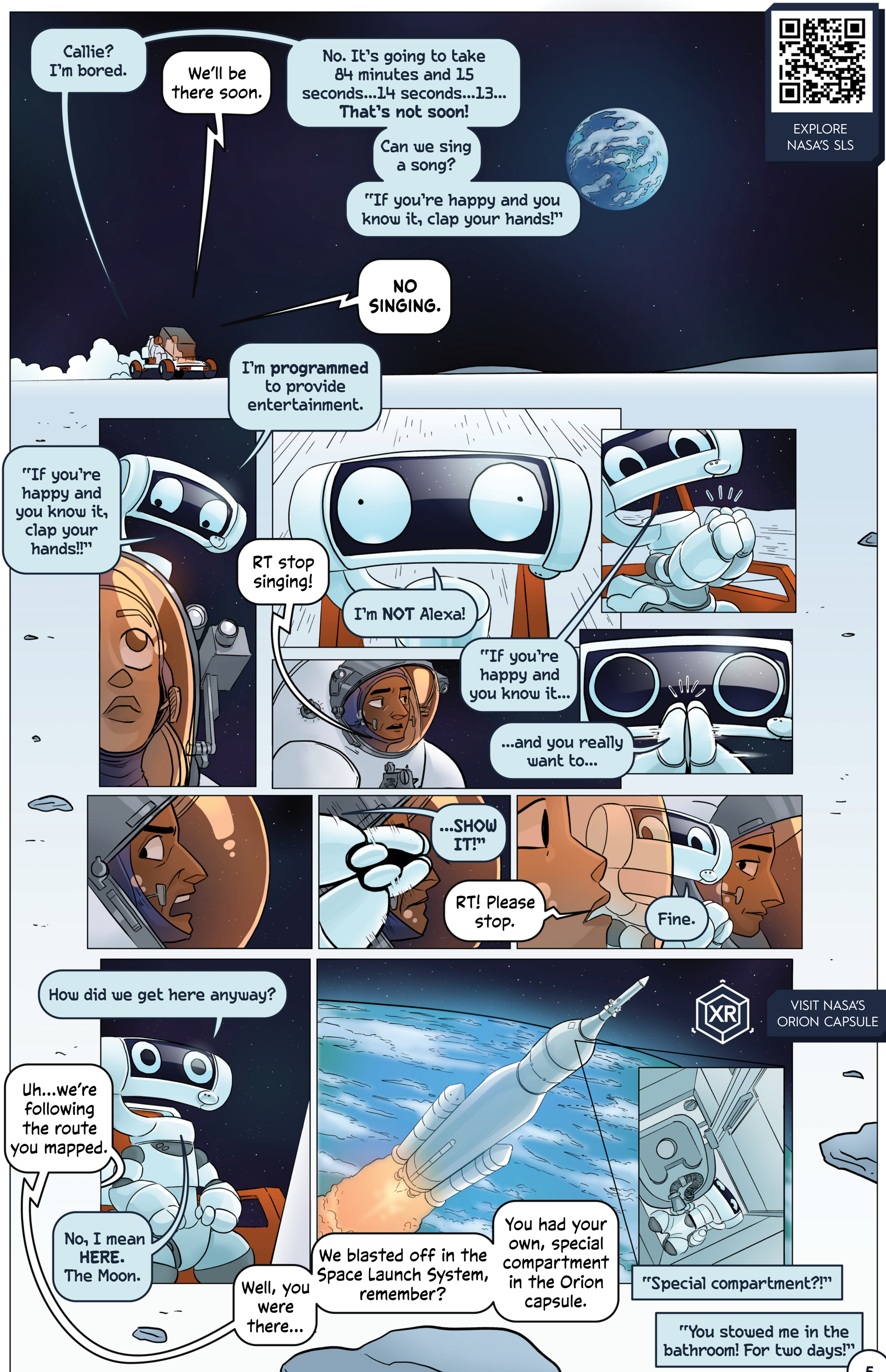

INSIDE THE LUNAR HABITAT...
One woman...*
...a scientist...
...an ASTRONAUT.
GROWING PLANTS IN SPACE
On a journey unlike any other...
...to find a salad bar...
...IN SPACE!
*When RT's speech bubble is surrounded in marquee lights, he's using his Movie Announcer voice.



THEY SAID it couldn't be done...
THEY SAID there was no hope...
But they DIDN'T KNOW HER!
Now! CALLIE RODRIGUEZ... with SPINACH! KALE! And BROCCOLI!
Together again...
like you've NEVER SEEN THEM BEFORE!
In a forgotten place...
In a DANGEROUS place...
In a place where NO ONE GOES...
She rolled the dice...
and now she's TURNING UP THE HEAT!
Actually, I had this same salad yesterday, so...
IT DOESN'T GET BETTER THAN THIS!
Really? Oh no.
Seeing is BELIEVING! Based on a true story...
CALLIE RODRIGUEZ...BIGGER and BETTER than ever!
Bigger? I haven't gotten any-
You about ready to head out?
Yeah, just finishing my salad.
All she wanted was to finish her salad...
...but SOMEONE wouldn't let her.
Is he going to do the movie announcer thing the whole time again?
Probably.
Great.

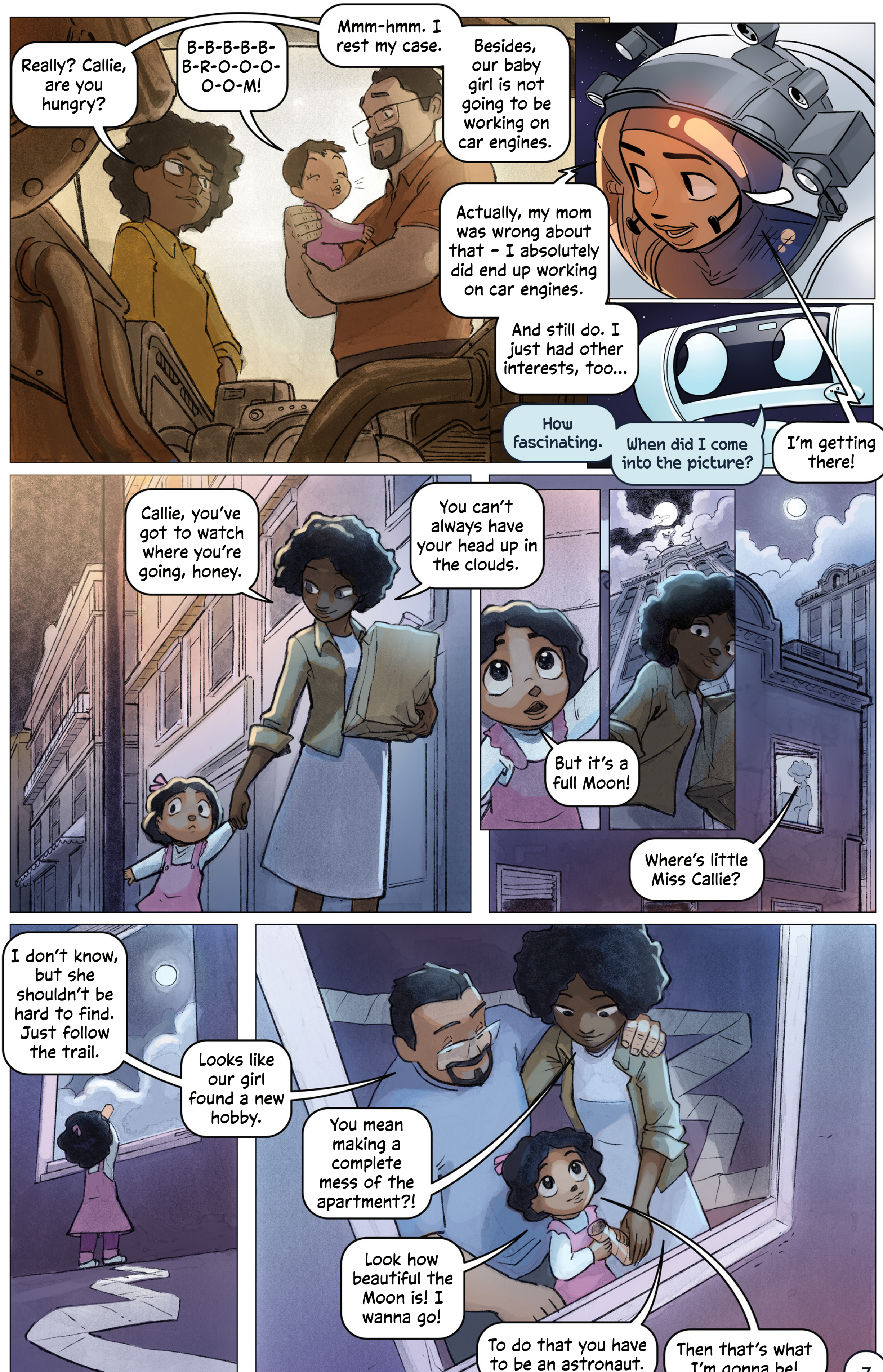

EXPLORE NASA'S SPACESUIT
Does Dan have to come?
Yes, of course Dan has to come. We're checking the spectrometer at the Auggie-42 site, it's a two-person mission.
I could do that. We did lots of missions together before Dan came.
Dan, I think you should stay here, guard the habitat.
Guard it? Against what?
Things. Outside.
Alone on the Moon... ONE MAN was the only barrier between humanity... and the things outside...
Dan's coming, RT.
SHOTGUN!
No, you have to be in the back.
I don't like the back. I can't see as well.
Well, that's how the rover was designed.
Why does Dan get the front? He just got here!
LATER, OUTSIDE...
Oh! I wanna go see my friends!
RT, we're about to leave.
It won't take long! I promise. I just want to say hi.
Fine. But don't go far!
XR
VISIT THE LUNAR SURFACE

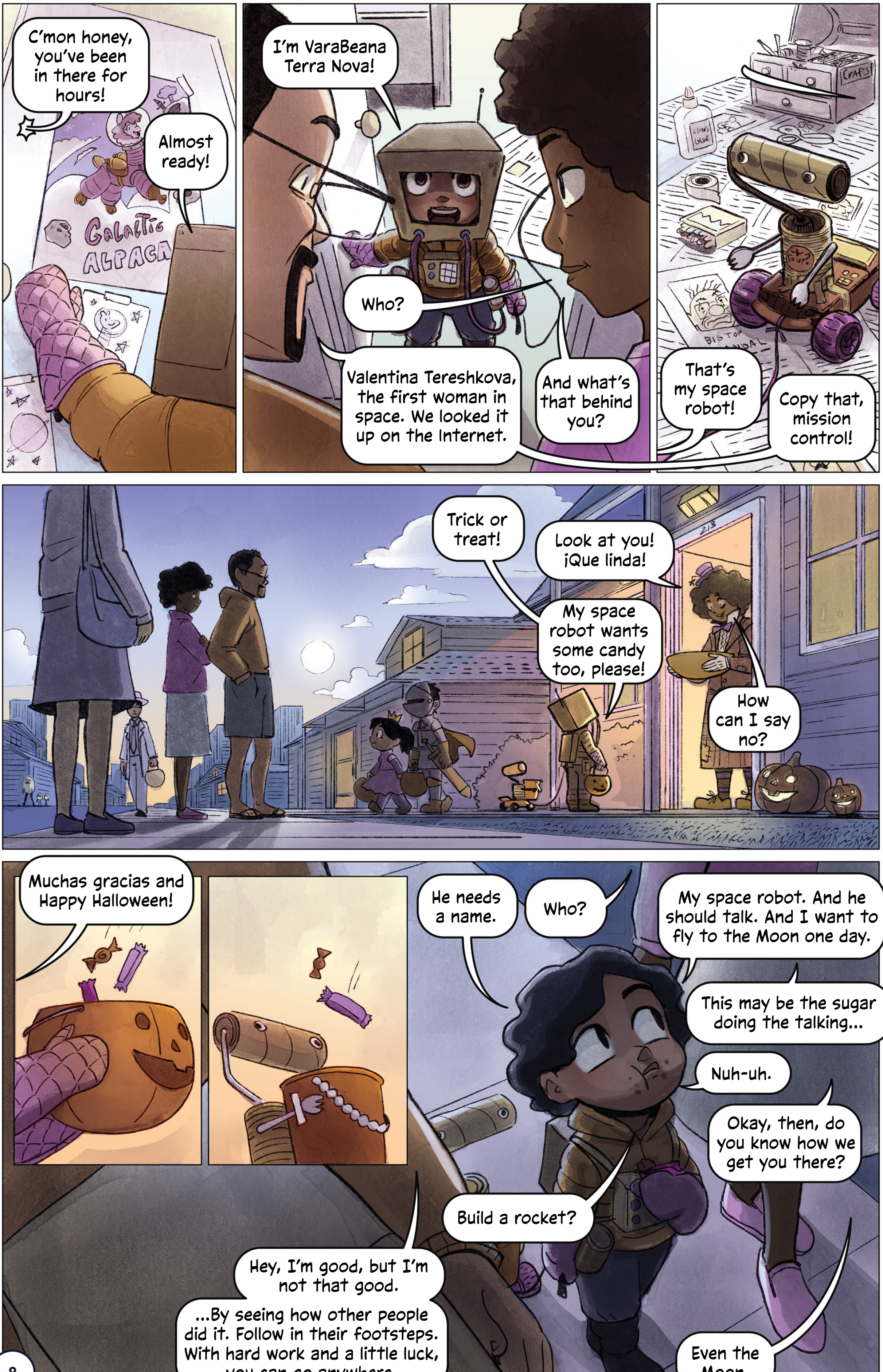

BUILDING HABITATS
Battery is at peak.
Okay. Temperature monitoring system looks good...
Those guys are so awesome.
They can build anything!
They're making Dan his own, special habitat!
It'll be ready by the time we get back!
Dan doesn't need his own habitat.
He does! Mission Control said! It'll be much better, Dan. You're gonna love it.
Very roomy. You won't need to come into our habitat... ever.
WHOA!
Careful there, little buddy. Low gravity is tricky.
I meant to do that.
C'mon. We need to put you in your car seat.
Commander Callie Rodriguez, the first woman on the Moon, sets out on an important lunar mission... with her trusted robot, RT.
And Mission Specialist Dan Patel...
Who will soon be replaced by a LOVEABLE PANDA!
That's not happening.
By a loveable GIRAFFE!
Nope.
An adorable GOPHER!
I think he wants a pet...

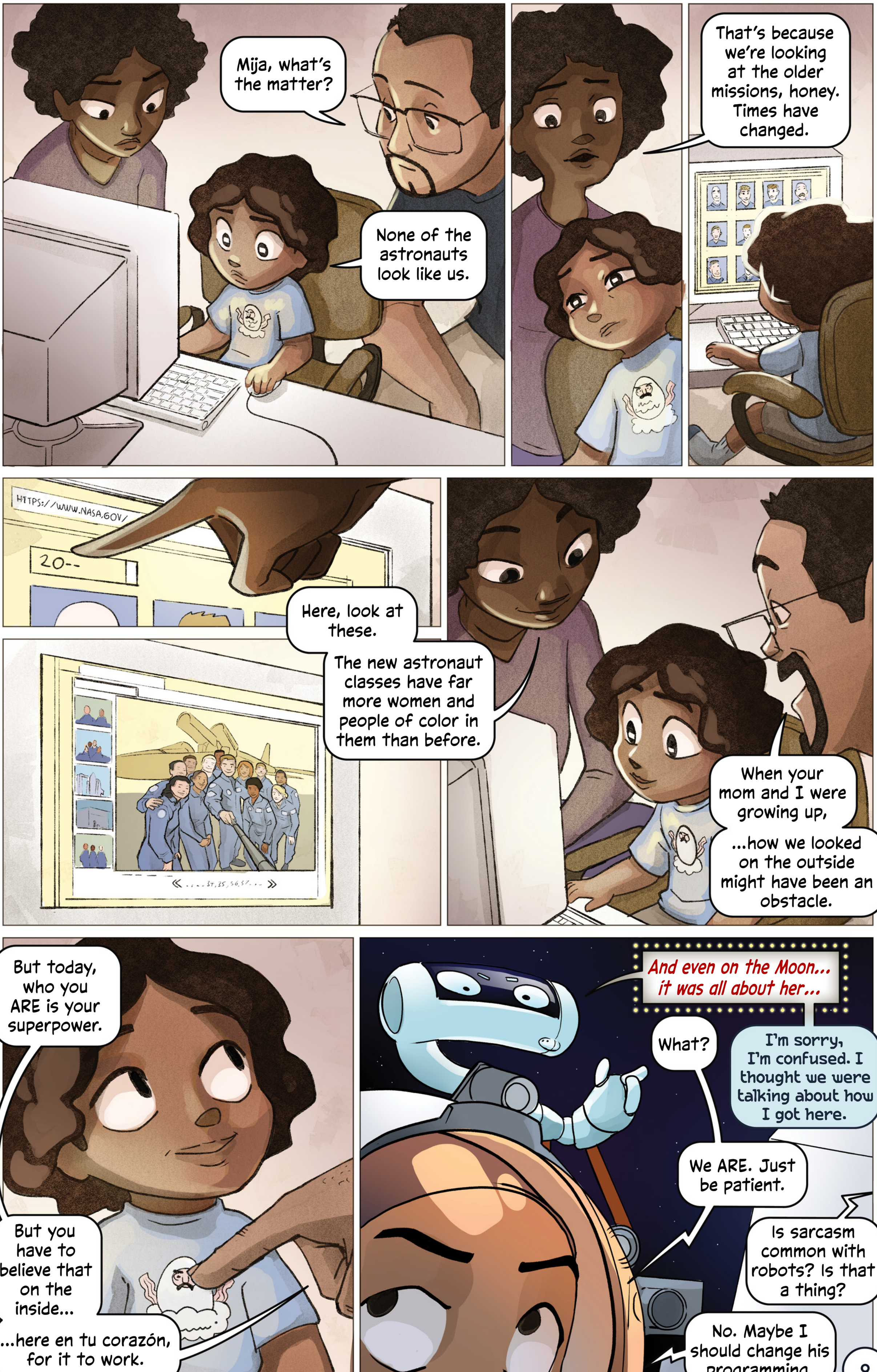


EXPLORE NASA'S SLS
Callie? I'm bored.
We'll be there soon.
No. It's going to take 84 minutes and 15 seconds...14 seconds...13... That's not soon!
Can we sing a song?
"If you're happy and you know it, clap your hands!"
NO SINGING.
I'm programmed to provide entertainment.
"If you're happy and you know it, clap your hands!!"
RT stop singing!
I'm NOT Alexa!
"If you're happy and you know it...
...and you really want to...
...SHOW IT!"
RT! Please stop.
Fine.
How did we get here anyway?
Uh...we're following the route you mapped.
No, I mean HERE. The Moon.
Well, you were there...
We blasted off in the Space Launch System, remember?
You had your own, special compartment in the Orion capsule.
VISIT NASA'S ORION CAPSULE
"Special compartment?!"
"You stowed me in the bathroom! For two days!"

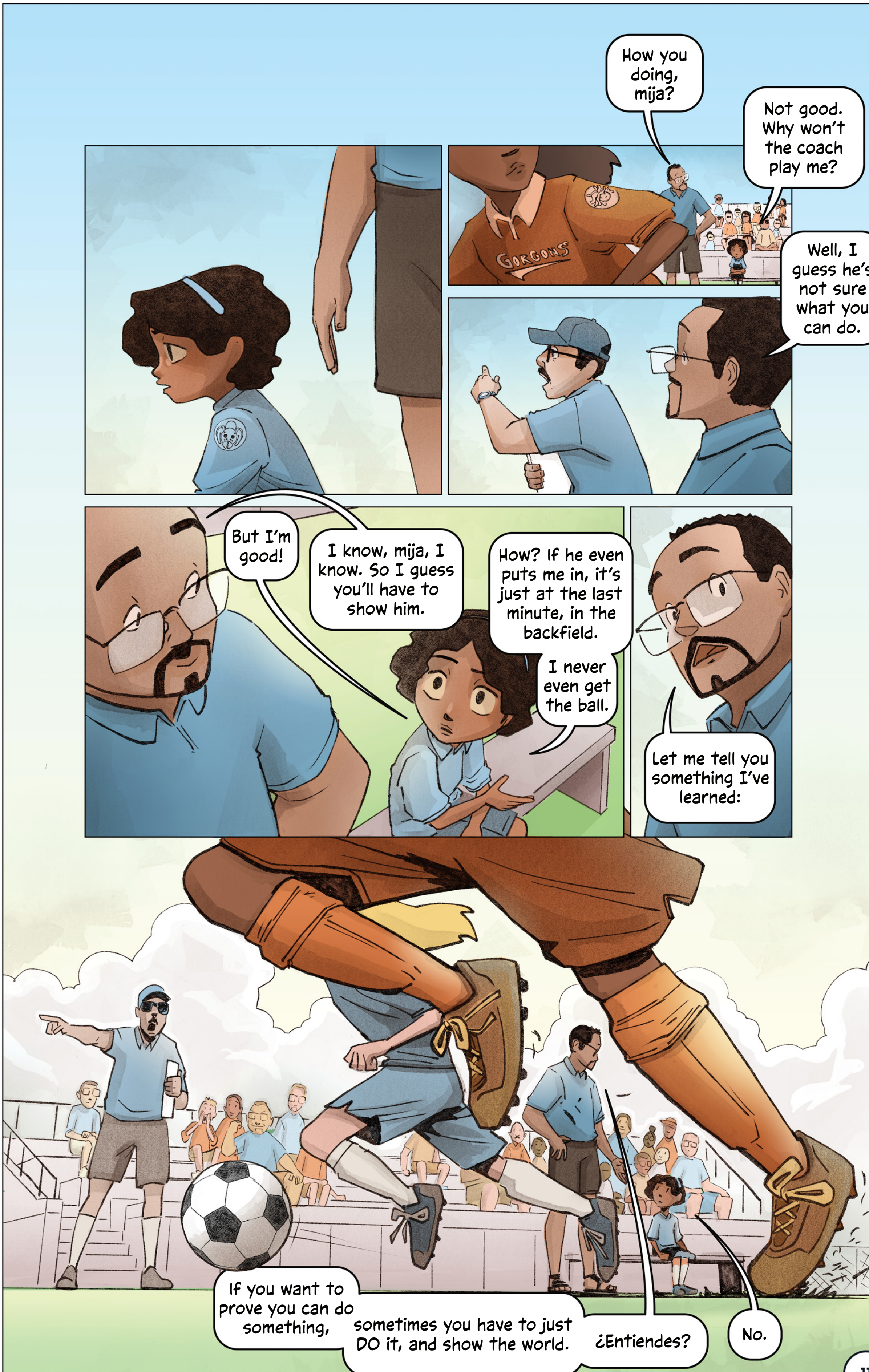

Well, we needed to save space.
I am still traumatized by that experience. Of course I remember it!
That's not what I'm talking about.
I mean, how did I GET HERE?
How did I... come to be?
Has a robot ever asked that question before?
Uh, I dunno...I don't think so...
"If you're happy and you know it,
CLAP YOUR HANDS!"
No singing!
Answer my question then.
"Well, I guess it all started in my dad's auto shop...he's who got me interested in building things...and going places..."
She's back here with me!
She should if she's my assistant.
A baby shouldn't be back here!
Callie, what sound does a car make?
Callie? Where are you?
B-B-B-B-B-B-R-O-O-O-O-O-M!
See? That's mechanical aptitude! She's a genius!


Really? Callie, are you hungry?
B-B-B-B-B-B-R-O-O-O-O-O-M!
Mmm-hmm. I rest my case.
Besides, our baby girl is not going to be working on car engines.
Actually, my mom was wrong about that – I absolutely did end up working on car engines.
And still do. I just had other interests, too...
How fascinating.
When did I come into the picture?
I'm getting there!
Callie, you've got to watch where you're going, honey.
You can't always have your head up in the clouds.
But it's a full Moon!
Where's little Miss Callie?
I don't know, but she shouldn't be hard to find. Just follow the trail.
Looks like our girl found a new hobby.
You mean making a complete mess of the apartment?!
Look how beautiful the Moon is! I wanna go!
To do that you have to be an astronaut.
Then that's what I'm gonna be!


C'mon honey, you've been in there for hours!
Almost ready!
GALACTIC ALPACA
I'm VaraBeana Terra Nova!
Who?
Valentina Tereshkova, the first woman in space. We looked it up on the Internet.
And what's that behind you?
CRAFTS
Elmer's Glue
That's my space robot!
Copy that, mission control!
Trick or treat!
Look at you! ¡Que linda!
My space robot wants some candy too, please!
How can I say no?
Muchas gracias and Happy Halloween!
He needs a name.
Who?
My space robot. And he should talk. And I want to fly to the Moon one day.
This may be the sugar doing the talking...
Nuh-uh.
Okay, then, do you know how we get you there?
Build a rocket?
Hey, I'm good, but I'm not that good.
...By seeing how other people did it. Follow in their footsteps. With hard work and a little luck, you can go anywhere.
Even the Moon.


Mija, what's the matter?
None of the astronauts look like us.
That's because we're looking at the older missions, honey. Times have changed.
HTTPS://WWW.NASA.GOV/
20--
Here, look at these.
The new astronaut classes have far more women and people of color in them than before.
When your mom and I were growing up,
...how we looked on the outside might have been an obstacle.
But today, who you ARE is your superpower.
But you have to believe that on the inside...
...here en tu corazón, for it to work.
And even on the Moon... it was all about her...
What?
I'm sorry, I'm confused. I thought we were talking about how I got here.
We ARE. Just be patient.
Is sarcasm common with robots? Is that a thing?
No. Maybe I should change his programming.

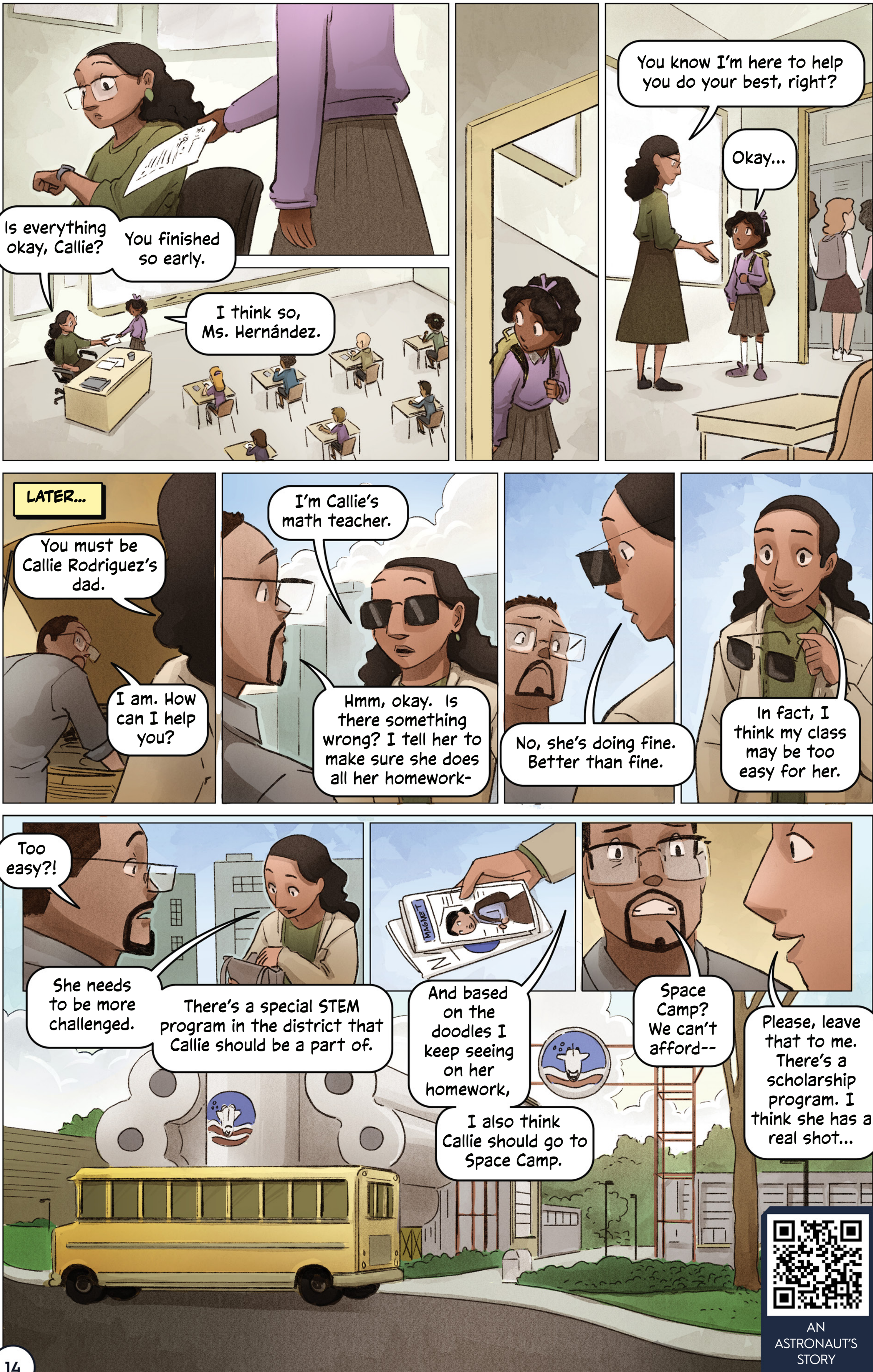

So, is that when you knew you wanted to be an astronaut?
Oh, no. For the longest time I thought I was going to be a pro soccer player...or a racecar driver...or both!
GOOOOOOOAAAAAAAAL!!!!!
What's your next move?
That's easy. Replace the carb.
Not so fast. The sensor could be bad. Always check that first.
Being a good mechanic is just as much about NOT fixing the things that don't need repair...
GO SPIDERS


How you doing, mija?
Not good. Why won't the coach play me?
Well, I guess he's not sure what you can do.
But I'm good!
I know, mija, I know. So I guess you'll have to show him.
How? If he even puts me in, it's just at the last minute, in the backfield.
I never even get the ball.
Let me tell you something I've learned:
If you want to prove you can do something,
sometimes you have to just DO it, and show the world.
¿Entiendes?
No.


GOOOOOOOAAAAAAAAAL!!!!!
Do you understand me now?
¡Sí, papá!
GO SPIDERS
SPIDERS
DASH!
GORGONS
SPIDERS

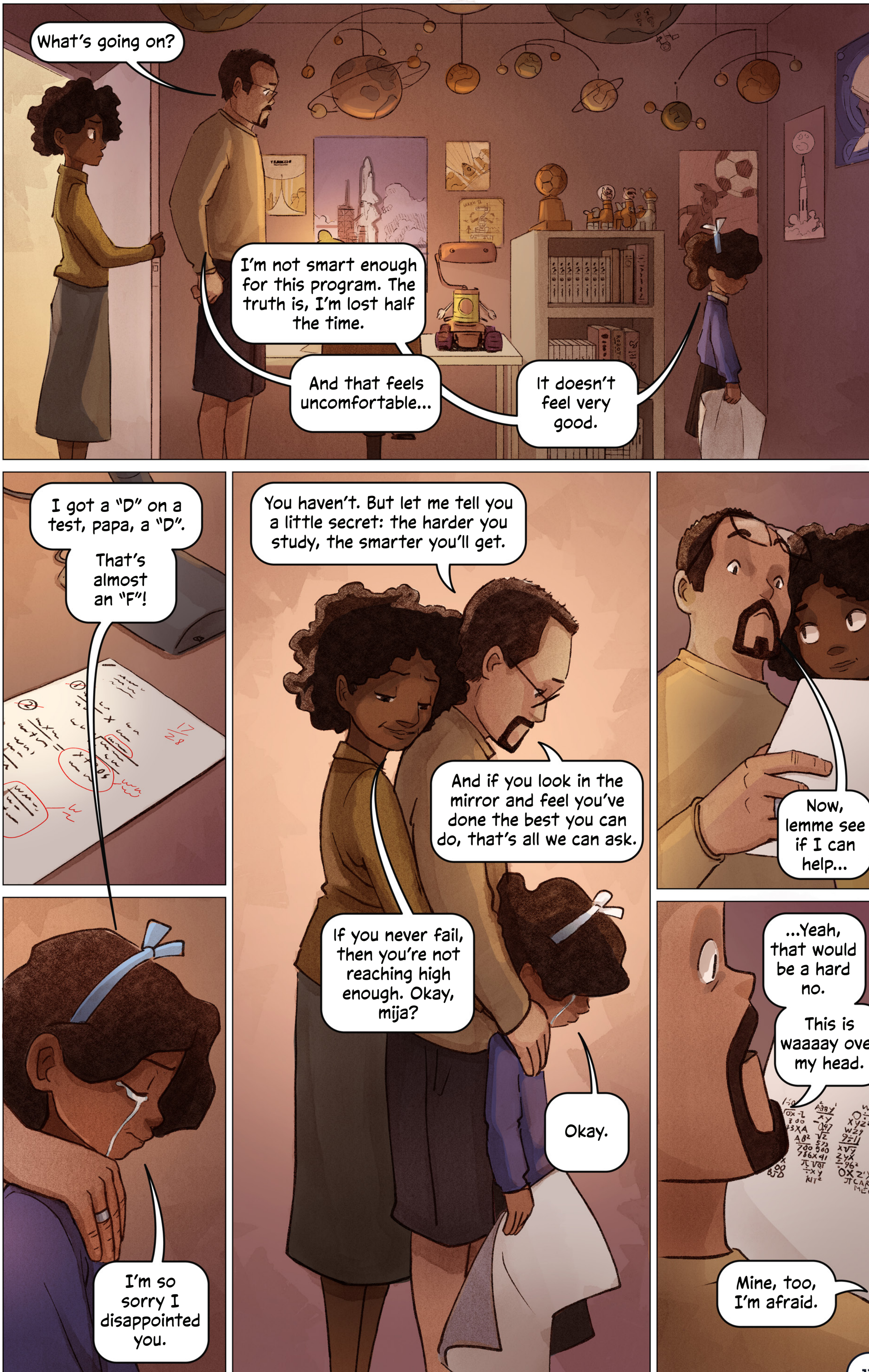


Wait. What is she-? Callie!!
GORGONS
GOOOOOOOOAAAAAAAALLL!!!
"I was pretty sure I was going to go pro after that."
"But then Ms. Hernández happened..."

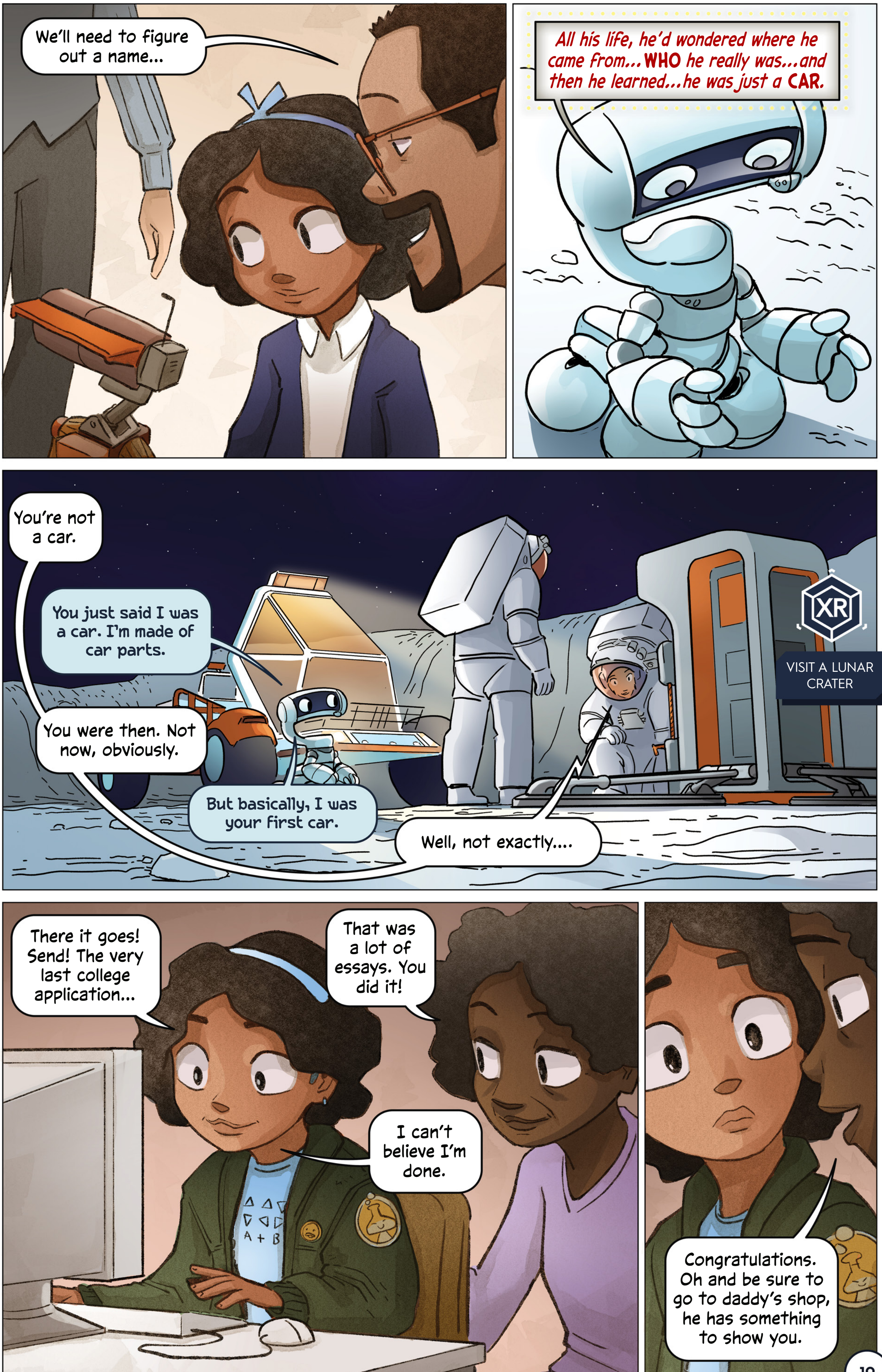

Is everything okay, Callie?
You finished so early.
I think so, Ms. Hernández.
You know I'm here to help you do your best, right?
Okay...
LATER...
You must be Callie Rodriguez's dad.
I am. How can I help you?
I'm Callie's math teacher.
Hmm, okay. Is there something wrong? I tell her to make sure she does all her homework-
No, she's doing fine. Better than fine.
In fact, I think my class may be too easy for her.
Too easy?!
She needs to be more challenged.
There's a special STEM program in the district that Callie should be a part of.
And based on the doodles I keep seeing on her homework,
I also think Callie should go to Space Camp.
Space Camp? We can't afford--
Please, leave that to me. There's a scholarship program. I think she has a real shot...
AN ASTRONAUT'S STORY


"One thing I learned at Space Camp: exploration is in our DNA. And that's when I truly decided I wanted to be an astronaut."
"To help me reach my goal, Ms. Hernández recommended me for a magnet junior high for math and science."
"I had to take a bus there, and didn't know anyone, but I was excited."
"I just didn't realize how tough it was going to be..."


I'd like everyone's attention. Today we have a new classmate joining us. Welcome Callista. And please, take a seat.
#$%@
(&($%#$!!@%
$%^&*^&* #$#$(^&(^
Any questions?
Good. We're having a quiz on this section next week.
Evidently this was a tough test for some...
SPIDERS
SPIDERS


What's going on?
I'm not smart enough for this program. The truth is, I'm lost half the time.
And that feels uncomfortable...
It doesn't feel very good.
I got a "D" on a test, papa, a "D".
That's almost an "F"!
I'm so sorry I disappointed you.
You haven't. But let me tell you a little secret: the harder you study, the smarter you'll get.
And if you look in the mirror and feel you've done the best you can do, that's all we can ask.
If you never fail, then you're not reaching high enough. Okay, mija?
Okay.
Now, lemme see if I can help...
...Yeah, that would be a hard no.
This is waaaay over my head.
Mine, too, I'm afraid.


We have a science fair coming up. I could use your help.
I don't think they're going to allow parents to--
You wouldn't be helping, technically.
M.K. II
You'd just be making sure I don't burn the shop down.
It can go in reverse too. All you have to do is press this button.
Impressive. You made this yourself?
It was all her idea.
And what do you call this... contraption?
Umm...good question. Lemme think...
...and first place goes to...Callie Rodriguez and her used-car-parts-robot-guy!

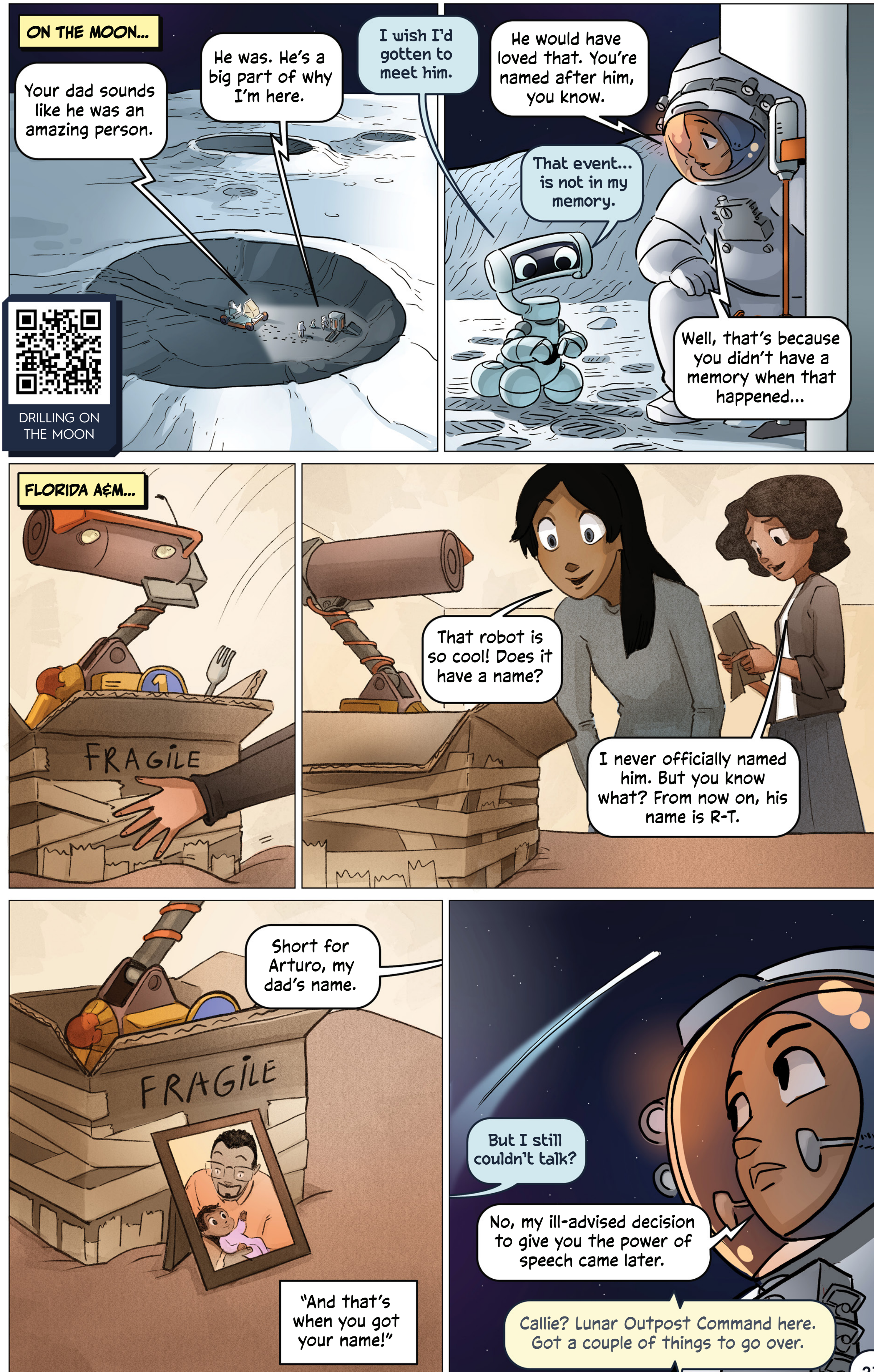

We'll need to figure out a name...
All his life, he'd wondered where he came from...WHO he really was...and then he learned...he was just a CAR.
You're not a car.
You just said I was a car. I'm made of car parts.
You were then. Not now, obviously.
But basically, I was your first car.
Well, not exactly....
XR
VISIT A LUNAR CRATER
There it goes! Send! The very last college application...
That was a lot of essays. You did it!
I can't believe I'm done.
Congratulations. Oh and be sure to go to daddy's shop, he has something to show you.



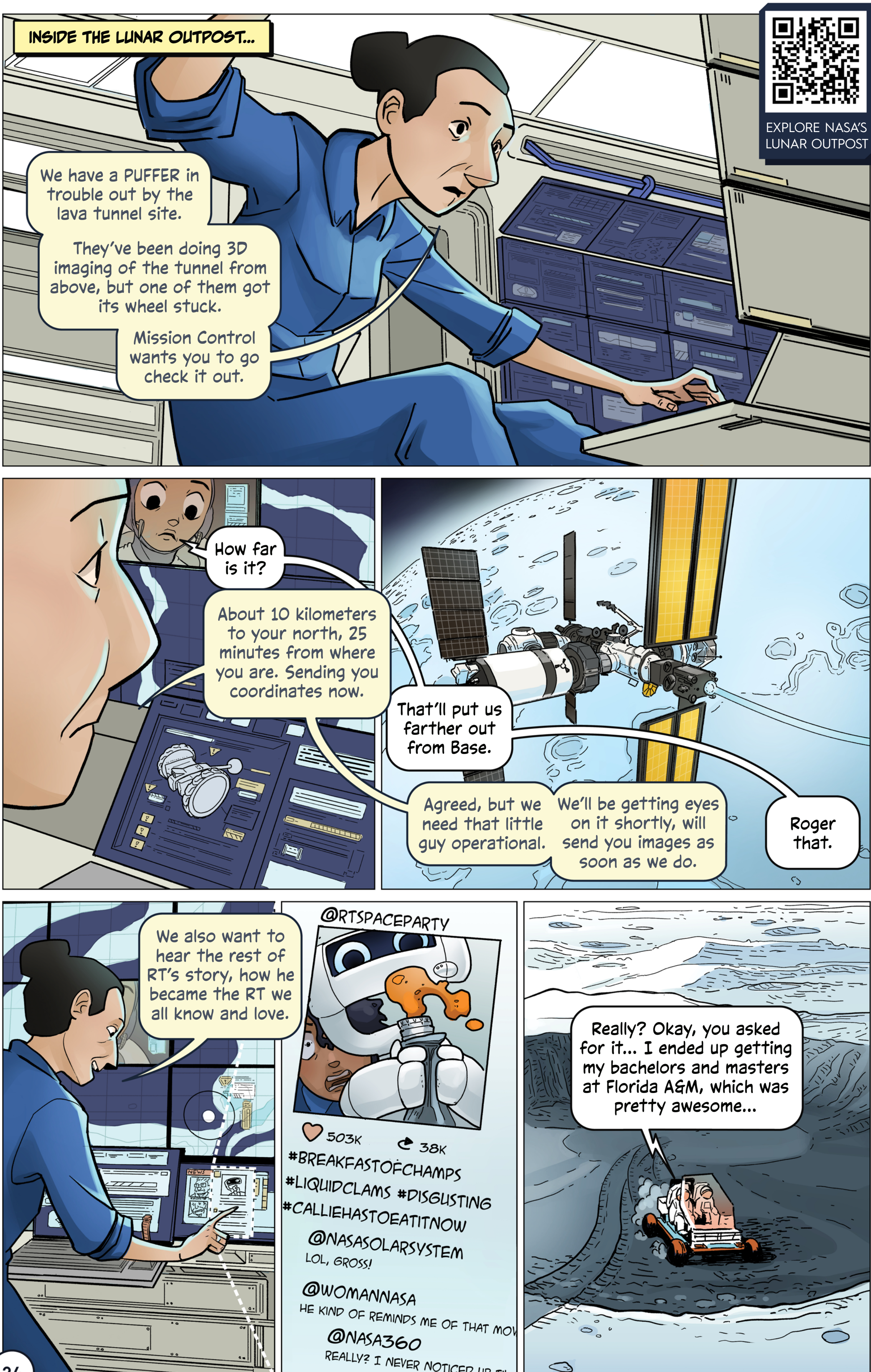
Mom said you wanted to show me something?
I do. Follow me.
What do you think?
What do I think? It's a '72 Mustang. It's beautiful. Whose is it?
I've been working on it for about a year.
It's yours now.
But I haven't done anything, or gotten in anywhere yet.
We're not giving you this for what you did, mija. We're giving it to you for the type of person you are.
"I LOVED that car... and my dad loved seeing me drive it."
"He was so proud. Everything was going so great, falling into place..."


MONTHS LATER...
Hey mom, what's up?
Honey, you need to come home. As soon as possible.
Something terrible has happened...
"When I got home, my mom told me that my dad had passed away from a sudden heart attack."
"One minute he was there, the next minute he was gone..."
"Life in general became a lot less sweet..."


"For a long time after my dad died, I didn't care about anything. Not school, not soccer. Not even my dream of becoming an astronaut."
"But I finally realized what would have upset my dad the most was if I gave up. So I couldn't. But now that he was gone, I also needed to help my mom."
Congratulations, baby! UCLA was your number one pick! Your father would be so proud.
CONGRATULATIONS! You're #UCLABOUND!
I know. But it's not my top pick anymore.
Where do you want to go?
Florida A&M.
What? Why? I mean, it's a school, but--
It's where you went.
Well, yeah. But you got into--
And it's close to home. I can come back on the weekends. I want to help you out in the shop.
I'll be fine.
I know, mom. But my mind's made up...



ON THE MOON...
Your dad sounds like he was an amazing person.
He was. He's a big part of why I'm here.
I wish I'd gotten to meet him.
He would have loved that. You're named after him, you know.
That event... is not in my memory.
Well, that's because you didn't have a memory when that happened...
DRILLING ON THE MOON
FLORIDA A&M...
FRAGILE
That robot is so cool! Does it have a name?
I never officially named him. But you know what? From now on, his name is R-T.
Short for Arturo, my dad's name.
FRAGILE
"And that's when you got your name!"
But I still couldn't talk?
No, my ill-advised decision to give you the power of speech came later.
Callie? Lunar Outpost Command here. Got a couple of things to go over.


INSIDE THE LUNAR OUTPOST...
EXPLORE NASA'S LUNAR OUTPOST
We have a PUFFER in trouble out by the lava tunnel site.
They've been doing 3D imaging of the tunnel from above, but one of them got its wheel stuck.
Mission Control wants you to go check it out.
How far is it?
About 10 kilometers to your north, 25 minutes from where you are. Sending you coordinates now.
That'll put us farther out from Base.
Agreed, but we need that little guy operational.
We'll be getting eyes on it shortly, will send you images as soon as we do.
Roger that.
We also want to hear the rest of RT's story, how he became the RT we all know and love.
@RTSPACEPARTY
503K
38K
#BREAKFASTOFCHAMPS
#LIQUIDCLAMS #DISGUSTING
#CALLIEHASTOEATITNOW
@NASASOLARSYSTEM
LOL, GROSS!
@WOMANNASA
HE KIND OF REMINDS ME OF THAT MOV
@NASA360
REALLY? I NEVER NOTICED UP TIL
Really? Okay, you asked for it... I ended up getting my bachelors and masters at Florida A&M, which was pretty awesome...

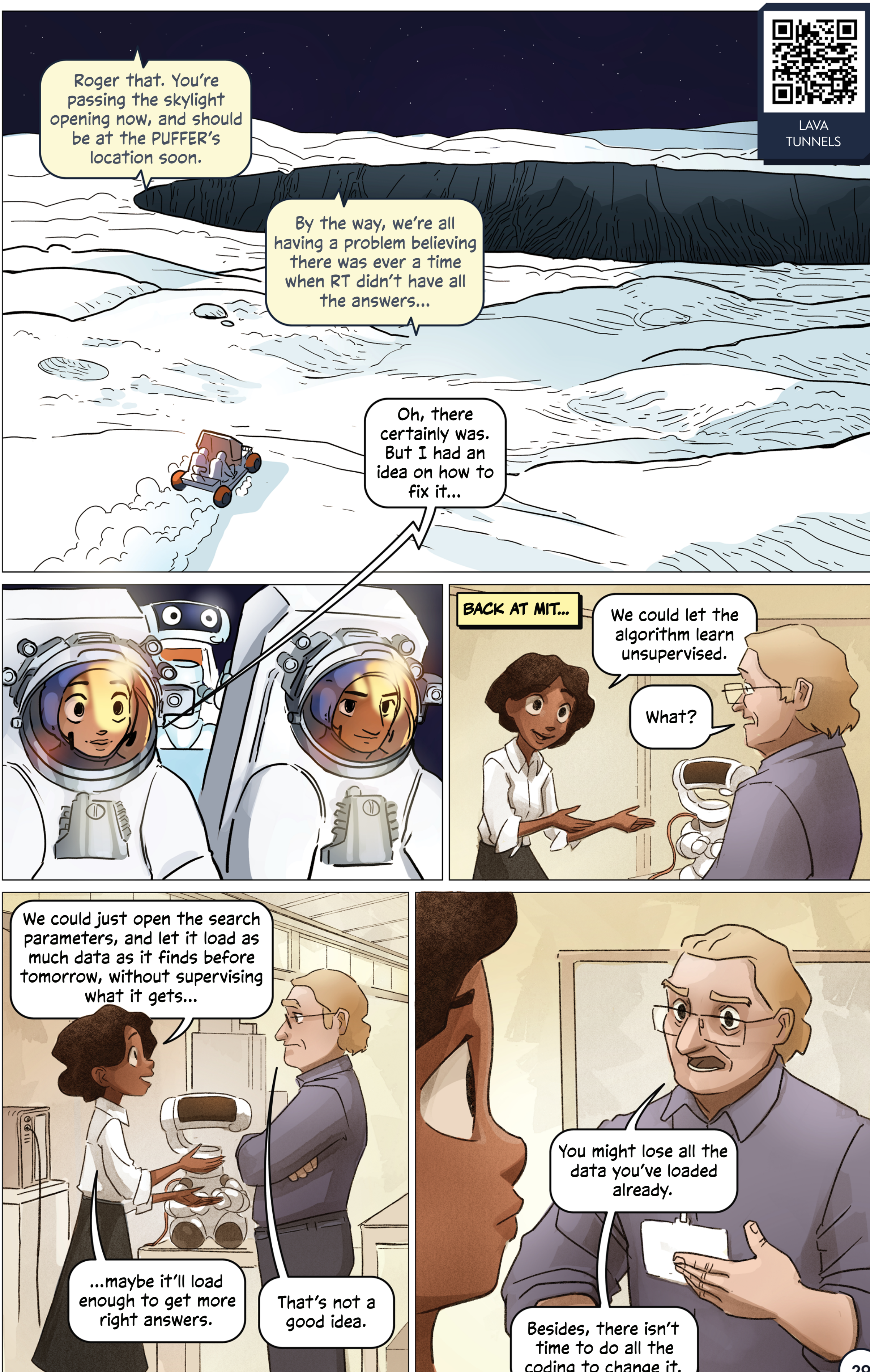


Clockwise from bottom left: Callie Rodriguez, Dereck Trevor,
"Project Curveball"
by Megan Theising
"And it let me stay close to my mom..."
"I had lots of offers and could have made much more money doing something else."
CAMPUS JOB FAIR
TEACHFOR AMERICA
IN THE CLASSROOM...
MACHINE INTELLECT
EMOTION VS MIMICRY
"But I wanted to make a difference for kids like me...I wanted them to know what was possible."
"I knew I could pursue a corporate job. And I thought the reason I was putting it off was that I wasn't ready. But then my mom reminded me of something I'd forgotten about..."
You know, it's been two years since you received your graduate degree. You've had two years of experience in the field.
You could apply now.
To what?

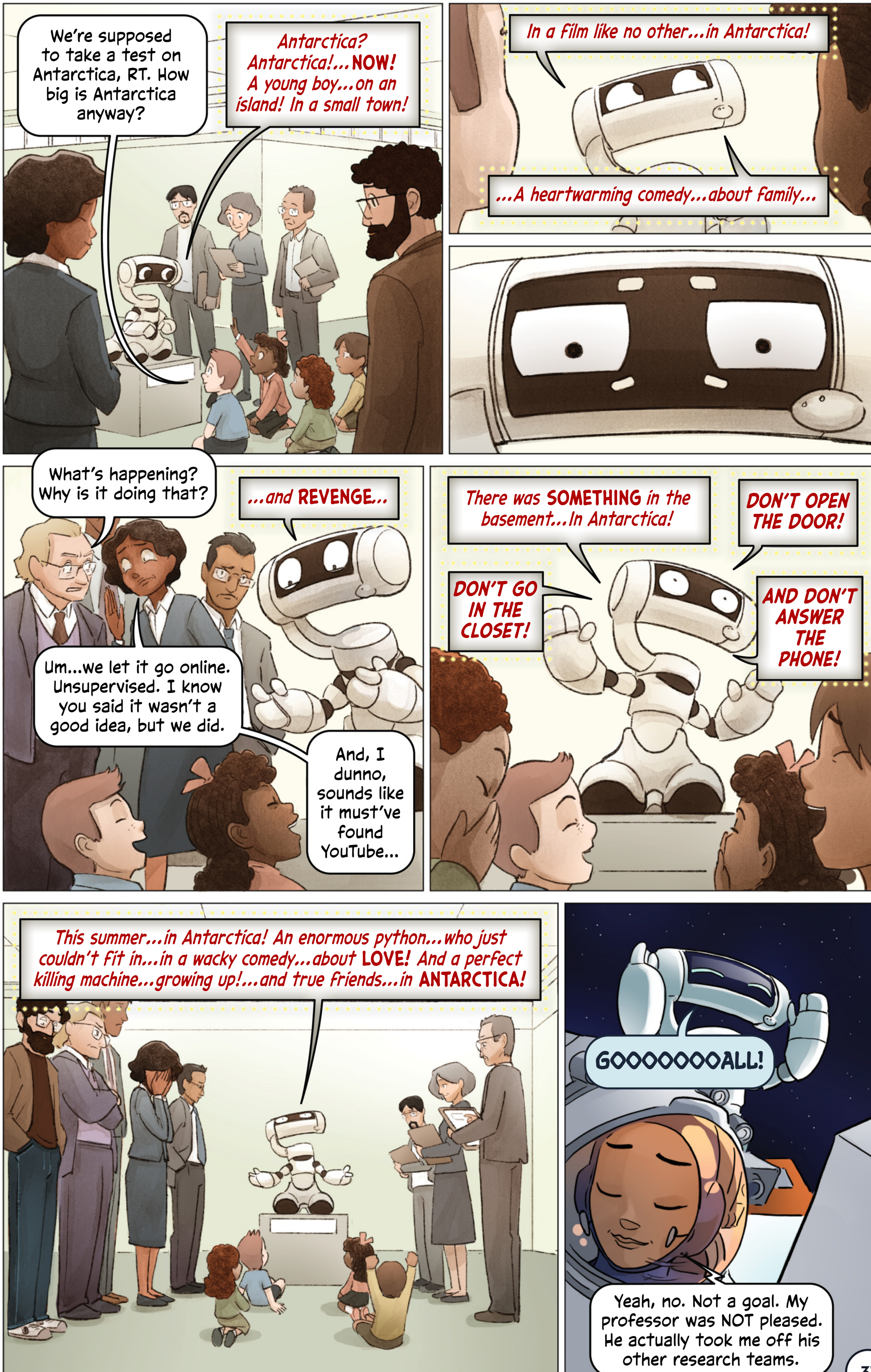

To become an astronaut! Why not? You still want to be one, don't you?
SPACE CAMP
Who wouldn't? But that was a kid's dream. I'm an adult now. Besides, the chances of getting picked are between slim and none.
If hard things were easy, then anyone could do them.
You sound like dad.
What he said then is still true today. But don't do it for him. If you're going to do it, do it for yourself.
Oh, and look what I found when I was cleaning out your room...
A child's dream is every bit as real as an adult's...
It's still just as beautiful...


ASTRONAUT REQUIREMENTS
NASA APPLIC
LUNAR OUTPOST...
Did you get in on your first try?
Nope.
Not on the first try, or the second. Or the third or the fourth, for that matter.
So what did you do?
"I remembered what my dad told me when I was a kid, first looking into being an astronaut."
"He said I should 'follow in their footsteps'."
"So I figured out what made the other astronauts stand out"
Konnichi wa.
Hello: "Konnichi wa."
"and did exactly that..."


But because I couldn't just endlessly wait for NASA to figure out how awesome I was...I decided to go back to school.
ROBOT EXPLORERS
That's where you come in.
MIT...
"I became part of a brilliant research team."
"We wanted to show how AI* could be used to help elementary school kids who were struggling with particular subjects."
"With AI everyone can have a tutor."
REMOTE TUTOR
"Then we got an opportunity to show off what we could do at a competition at the university."
"But we just weren't getting the results we wanted."
"You were...having trouble coming up with the right answers."
*Artificial Intelligence
"That was clearly your fault. You were the one trying to get a car to talk."
We've got images of the downed PUFFER, Callie.
Sending to you now.
Got them.


LAVA TUNNELS
Roger that. You're passing the skylight opening now, and should be at the PUFFER's location soon.
By the way, we're all having a problem believing there was ever a time when RT didn't have all the answers...
Oh, there certainly was. But I had an idea on how to fix it...
BACK AT MIT...
We could let the algorithm learn unsupervised.
What?
We could just open the search parameters, and let it load as much data as it finds before tomorrow, without supervising what it gets...
...maybe it'll load enough to get more right answers.
That's not a good idea.
You might lose all the data you've loaded already.
Besides, there isn't time to do all the coding to change it.

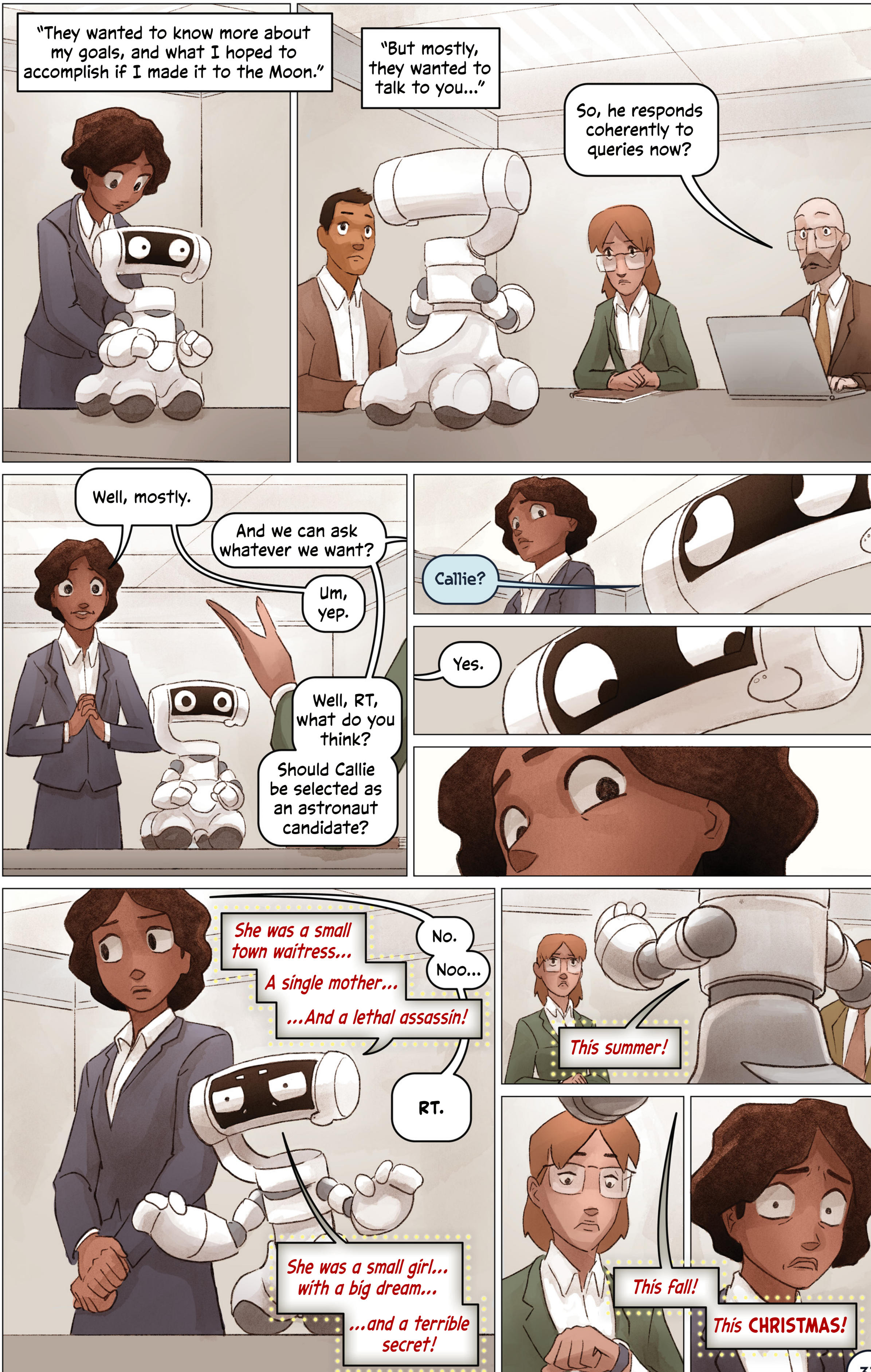

Callie, sometimes you just need to accept that your approach didn't work, and start over. That's how science works.
"But I didn't want to start over."
"I thought it COULD work."
SOLUTIONS
Wait a minute. I got it!
GOOOOOAAAAAL!
What?
Sometimes, you have to just DO IT, and show the world!
Okaaay...
Do it? He said no.
Well...not really.
He said he didn't think it was a good idea.
He didn't say we couldn't do it.
Besides, he's our ADVISOR.
The decision is up to us. It's our team. I'll take full responsibility, okay? It's my idea. I'll take the blame if it doesn't work...
LATER...
SURFING...
C'mon. You can learn fast. I know you can...

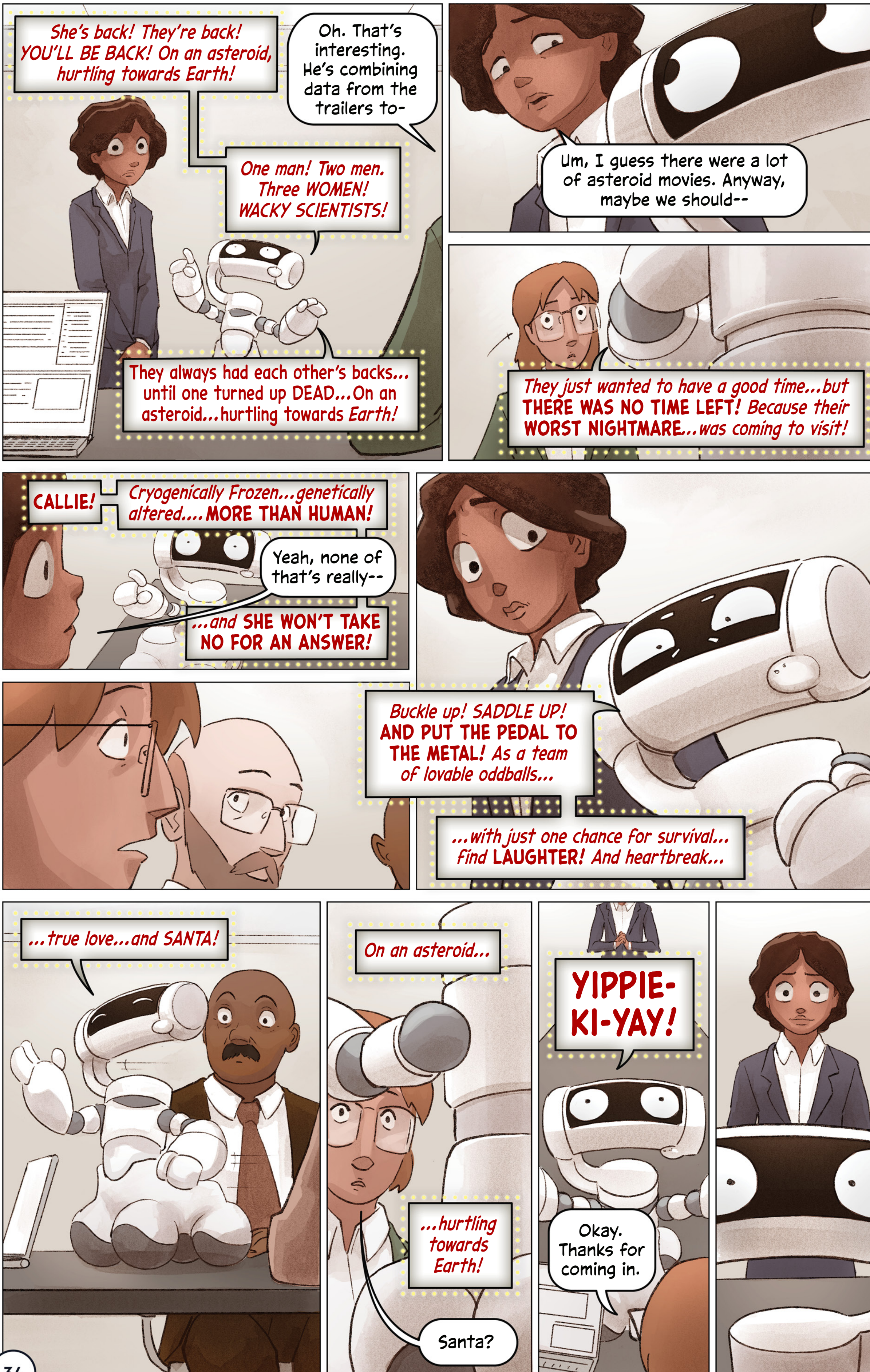


We're supposed to take a test on Antarctica, RT. How big is Antarctica anyway?
Antarctica? Antarctica!...NOW! A young boy...on an island! In a small town!
In a film like no other...in Antarctica!
...A heartwarming comedy...about family...
What's happening? Why is it doing that?
...and REVENGE...
Um...we let it go online. Unsupervised. I know you said it wasn't a good idea, but we did.
And, I dunno, sounds like it must've found YouTube...
There was SOMETHING in the basement...In Antarctica!
DON'T OPEN THE DOOR!
DON'T GO IN THE CLOSET!
AND DON'T ANSWER THE PHONE!
This summer...in Antarctica! An enormous python...who just couldn't fit in...in a wacky comedy...about LOVE! And a perfect killing machine...growing up!...and true friends...in ANTARCTICA!
GOOOOOOOALL!
Yeah, no. Not a goal. My professor was NOT pleased. He actually took me off his other research teams.



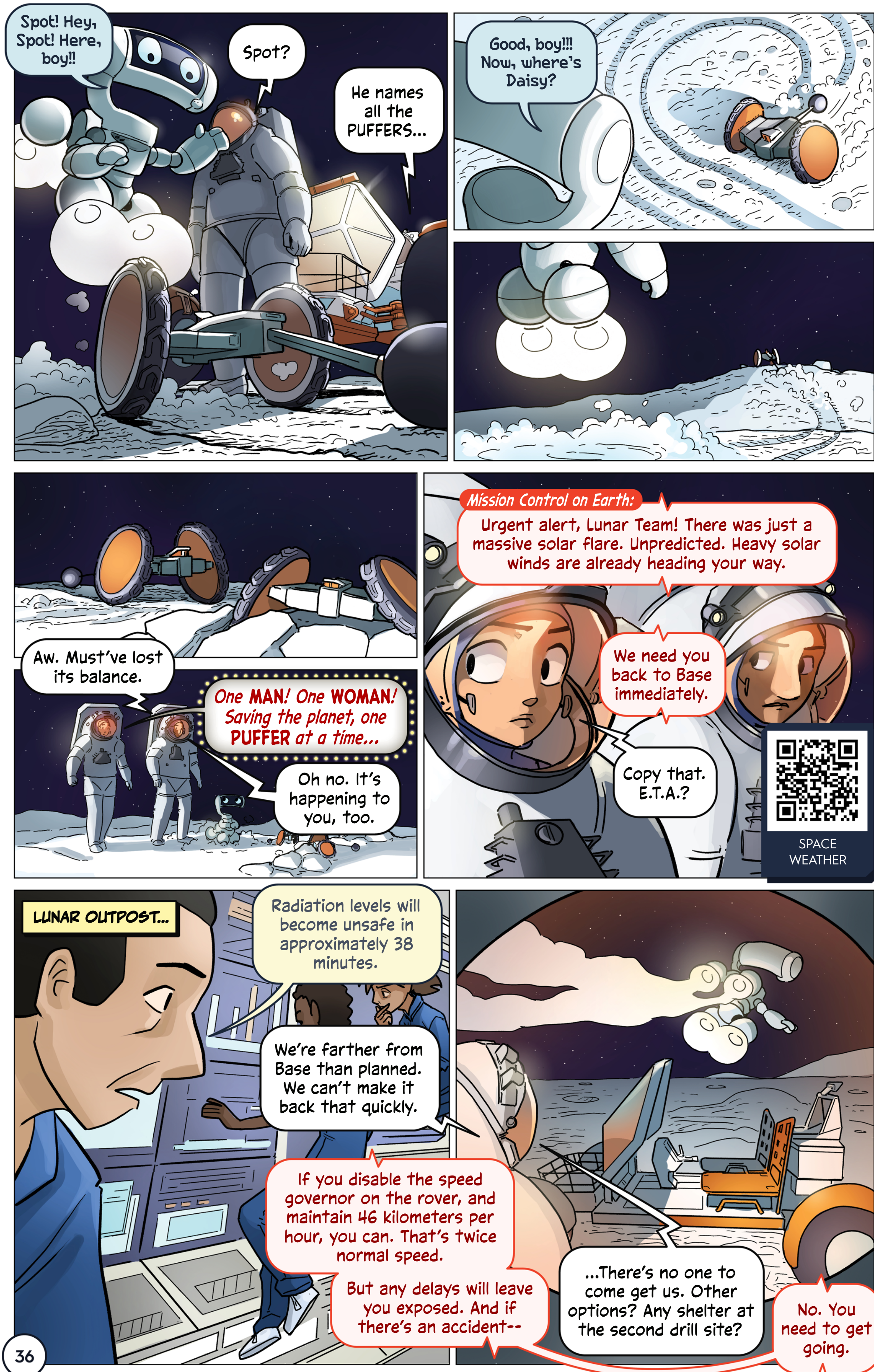
"After that, my prospects at the university didn't look so great. I was feeling pretty unsure about things, honestly."
"But then, oddly enough, I got my first NASA interview request."
"I was ridiculously nervous."
"And, um, I talk too much when I'm nervous."
"So when they asked how my research was going..."
"...I ended up telling them what happened with the presentation."
Wait, what? It talks in movie trailers?
Well, yeah. Kind of.
So let me get this straight:
You decided not to take the advice of your faculty advisor?
Right, we didn't. *I* didn't.
But if you had followed his advice, this wouldn't have happened. Your robot, RT, would not be talking in movie trailers?
Um, right. Probably not.
Hm.
"I thought for sure I'd blown it."
A FEW WEEKS LATER...
"But I guess that's what made them give me a second interview."

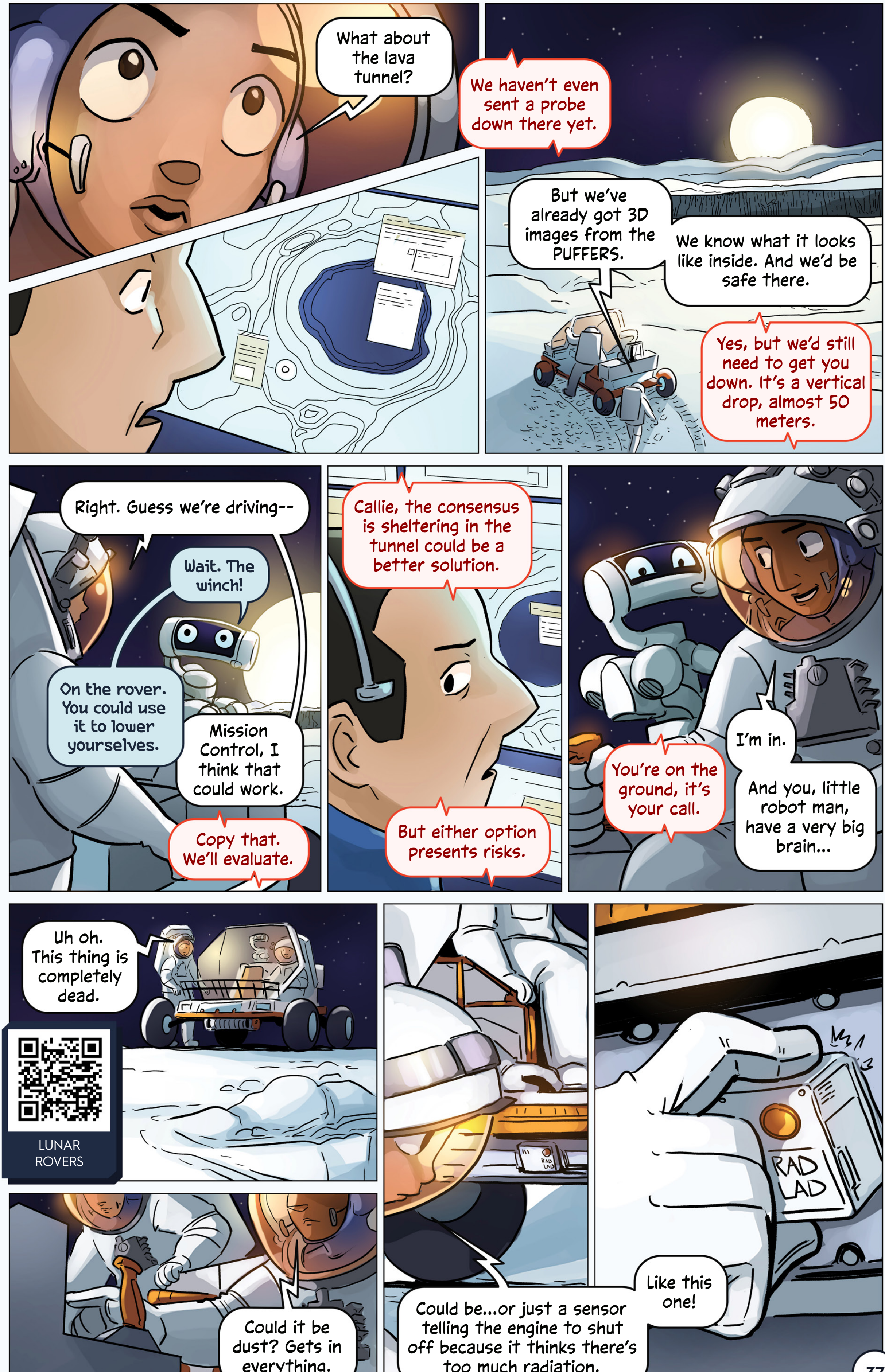

"They wanted to know more about my goals, and what I hoped to accomplish if I made it to the Moon."
"But mostly, they wanted to talk to you..."
So, he responds coherently to queries now?
Well, mostly.
And we can ask whatever we want?
Um, yep.
Well, RT, what do you think?
Should Callie be selected as an astronaut candidate?
Callie?
Yes.
She was a small town waitress...
A single mother...
...And a lethal assassin!
No.
Noo...
RT.
She was a small girl... with a big dream...
...and a terrible secret!
This summer!
This fall!
This CHRISTMAS!



She's back! They're back! YOU'LL BE BACK! On an asteroid, hurtling towards Earth!
Oh. That's interesting. He's combining data from the trailers to-
One man! Two men. Three WOMEN! WACKY SCIENTISTS!
They always had each other's backs... until one turned up DEAD...On an asteroid...hurtling towards Earth!
Um, I guess there were a lot of asteroid movies. Anyway, maybe we should--
They just wanted to have a good time...but THERE WAS NO TIME LEFT! Because their WORST NIGHTMARE...was coming to visit!
CALLIE!
Cryogenically Frozen...genetically altered.... MORE THAN HUMAN!
Yeah, none of that's really--
...and SHE WON'T TAKE NO FOR AN ANSWER!
Buckle up! SADDLE UP! AND PUT THE PEDAL TO THE METAL! As a team of lovable oddballs...
...with just one chance for survival... Find LAUGHTER! And heartbreak...
...true love...and SANTA!
On an asteroid...
...hurtling towards Earth!
Santa?
YIPPIE-KI-YAY!
Okay. Thanks for coming in.


LUNAR OUTPOST...
So yeah, that didn't go so great. I figured it was over.
She thought it was OVER...
VISIT A LUNAR OUTPOST
XR
But after that is when I got the call.
But then she got THE CALL!
I did. And you were there!
MONTHS LATER...
"So basically, I'm the reason you're an astronaut?"
"I already knew that, but nice to have you confirm it."
"Well, something like that. They figured you'd eventually learn how to answer a question coherently."
"Sadly, we're still waiting for that day."
"Hey!"
Callie, you threw our whole schedule off up here, we've all just been listening to you!
RT will probably end up with even MORE Twitter followers once that story gets out.
By the way, you're just about to come up on the first PUFFER.

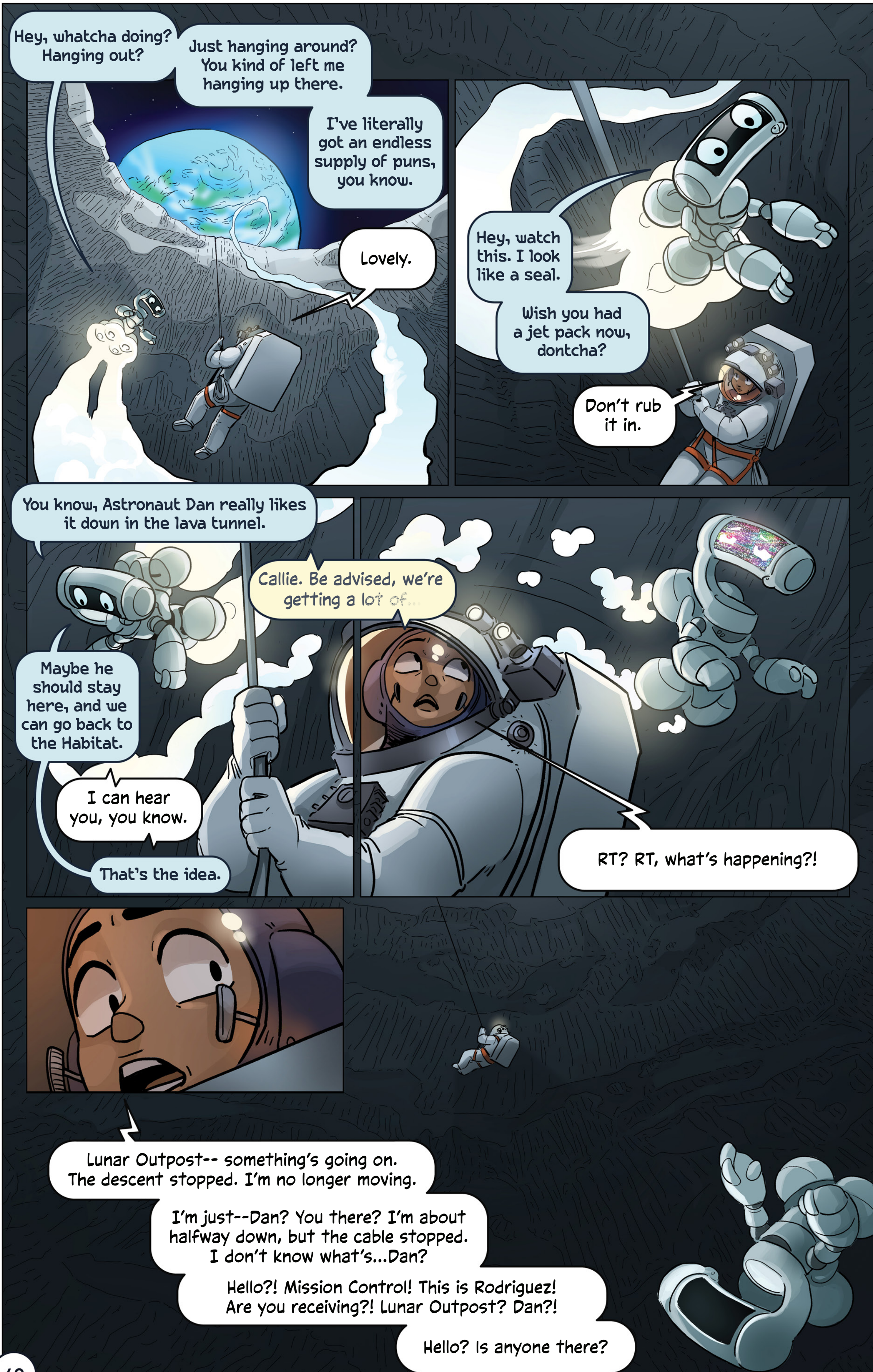

Spot! Hey, Spot! Here, boy!!
Spot?
He names all the PUFFERS...
Good, boy!!! Now, where's Daisy?
Aw. Must've lost its balance.
One MAN! One WOMAN! Saving the planet, one PUFFER at a time...
Oh no. It's happening to you, too.
Mission Control on Earth:
Urgent alert, Lunar Team! There was just a massive solar flare. Unpredicted. Heavy solar winds are already heading your way.
We need you back to Base immediately.
Copy that. E.T.A.?
SPACE WEATHER
LUNAR OUTPOST...
Radiation levels will become unsafe in approximately 38 minutes.
We're farther from Base than planned. We can't make it back that quickly.
If you disable the speed governor on the rover, and maintain 46 kilometers per hour, you can. That's twice normal speed.
But any delays will leave you exposed. And if there's an accident--
...There's no one to come get us. Other options? Any shelter at the second drill site?
No. You need to get going.


What about the lava tunnel?
We haven't even sent a probe down there yet.
But we've already got 3D images from the PUFFERS.
We know what it looks like inside. And we'd be safe there.
Yes, but we'd still need to get you down. It's a vertical drop, almost 50 meters.
Right. Guess we're driving--
Wait. The winch!
On the rover. You could use it to lower yourselves.
Mission Control, I think that could work.
Copy that. We'll evaluate.
Callie, the consensus is sheltering in the tunnel could be a better solution.
But either option presents risks.
You're on the ground, it's your call.
I'm in.
And you, little robot man, have a very big brain...
Uh oh. This thing is completely dead.
LUNAR ROVERS
Could it be dust? Gets in everything.
Could be...or just a sensor telling the engine to shut off because it thinks there's too much radiation.
Like this one!
RAD LAD


Try her now.
We've got power! How did you--??
A lesson a proud mechanic's daughter learned when she was a kid...Let's jam!
I can go down and get a visual before you descend to make sure the floor is safe.
Go. But carefully, RT. No barrel rolls...
The tunnel floor is flat, no hazards. And the geology is stable.
Dan, I'll lower you, then I'll program the winch to lower me automatically afterwards.
We can activate it remotely to pull us back up after the storm passes.
We're estimating 22 minutes before the flare hits.
Roger that.
Lean back, push off, and trust the cable.
I'll go slow. Tell me if I need to adjust the pace.



Hello, Astronaut Dan!
Enjoying your trip?
I shall accompany you...
Okay! At the bottom now!
You can pull it back up!
It's awesome down here, by the way!
ON THE SURFACE...
I'm baaaaack...
Lunar Outpost, I'm descending into the tunnel now. What's the ETA on the flare?
You've got about 8 minutes until it gets to you.
Oh good. Plenty of time.
Good luck, Callie. We will keep you apprised of radiation levels on the surface.
Ready?
Here goes. Okay, descent is underway.



Hey, whatcha doing? Hanging out?
Just hanging around? You kind of left me hanging up there.
I've literally got an endless supply of puns, you know.
Lovely.
Hey, watch this. I look like a seal.
Wish you had a jet pack now, dontcha?
Don't rub it in.
You know, Astronaut Dan really likes it down in the lava tunnel.
Maybe he should stay here, and we can go back to the Habitat.
I can hear you, you know.
That's the idea.
Callie. Be advised, we're getting a lot of...
RT? RT, what's happening?!
Lunar Outpost-- something's going on. The descent stopped. I'm no longer moving.
I'm just--Dan? You there? I'm about halfway down, but the cable stopped. I don't know what's...Dan?
Hello?! Mission Control! This is Rodriguez! Are you receiving?! Lunar Outpost? Dan?!
Hello? Is anyone there?

TRAILBLAZING WOMEN

While Callie is a fictional character, the first female astronaut and person of color will soon set foot on the Moon - a historic milestone and part of upcoming NASA missions.

As groundbreaking as this will be, it would not be possible without countless women, many of whom broke barriers to establish "firsts" of their own. Callie and her soon-to-be, real-life counterpart stand on their shoulders. This graphic novel is inspired by them and by those of you achieving your own "firsts."



1963
Valentina V. **Tereshkova**
First Woman in Space



1983
Sally **Ride**
First American Woman in Space



1992
Mae C. **Jemison**
First Black Woman in Space



1993
Ellen **Ochoa**
First Latina Woman in Space



2008
Peggy **Whitson**
First Woman to Serve as Commander of the International Space Station



2016
Charlie **Blackwell Thompson**
First Woman to Serve as Launch Director



We honor strong, smart, creative women every day at NASA. This work is in memoriam of our dear friend, Jean Buttecali, who was all of those things.

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